AUSTRALIAN SOCIETY FOR LIMNOLOGY INC

Australian Society for Limnology Inc.

NEWSLETTER

ASL Newsletter Volume 51 # 1
March 2013

ABN 54 606 483 226 ISSN 1037-2512

ASL Australian Society for Limnology

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The Australian Society for Limnology Inc. (ASL) is an Australian based scientific society whose focus is the study and management of inland waters. The ASL was established in 1961, and has a current membership of over 650 researchers, managers, engineers, teachers and tertiary level students from all states and territories. Members have a strong professional interest in inland aquatic issues, including the maintenance of biodiversity, the maintenance and/or restoration of water quality, and the wise use of aquatic resources. The Society also has a strong interest in fostering the scientific and intellectual development of tertiary students.

The Society includes members working in government agencies, tertiary institutions and many industries related to aquatic resources. Through their daily activities, members have contact with local communities and are in a sound position to interpret and advise on inland water issues. The Society has a substantial knowledge base, and has assumed a responsibility to ensure that this is available to those who manage inland waters.

Accordingly, the charter of the ASL is to further our understanding of Australia's inland waters and to promote their wise use and sustainable management. In this manner we will contribute to the continued existence of this valued resource and the maintenance and enhancement of the quality of life for all Australians. The ASL regularly produces a newsletter with notes on limnological activities, articles of interest, book reviews and announcements of upcoming events likely to be of interest to Members.

ASL Home Page
www.asl.org.au

Or on Facebook
http://www.facebook.com/groups/australiansocietyforlimnology

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AUSTRALIAN SOCIETY FOR LIMNOLOGY INC

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PRESIDENT'S REPORT

As 2013 gets underway, work is going on behind the scenes on not one, but two ASL Congresses! In 2013, we are meeting at the University of Canberra, in well, Canberra. The dates are 3rd – 6th December. Student workshops will be held on the 3rd followed by the welcome mixer and post-congress field trips will be held on the 7th. In keeping with the location of the congress, the symposium on the final day (6th) will focus on 'Water science for the 21st century' and aims to raise the profile of our science with policy folk in Canberra. Given the poor levels of funding for freshwater research in Australia at present, this is an important activity. The organizing committee and ASN are making rapid progress and the dates for abstract submission and registration are already on the website. Our student representatives are busy organizing another set of fun and relevant student activities for the 3rd December. Keep your eye on the website for details.

The second congress, in 2014, will be a joint congress with the Australian Society for Fish Biology, held in Darwin. It is a long time since ASL was held in Darwin, which has since become a hub for things limnological (along with some truly amazing field sites) and having a joint congress makes this an even more attractive place to visit. The dates will be 30th June – 4th July 2014– put them in your calendar. The organizing committee, comprising members of both societies ably supported by ASN, has the planning well underway. Erica Garcia is on the committee and can be contacted if you have queries at this early stage.

Prof Ross Thompson has taken up his role as the aquatic cluster representative at Science and Technology Australia (STA, formerly FASTS) and will be attending meetings on behalf of the cluster (ASL, AMSA, ASPAB). Although membership of STA has long been controversial within ASL, the opportunity to represent the cluster brings with it the chance to raise the profile of aquatic issues and research in Australia and to reiterate the need for funding in these areas. If members wish to raise matters to be taken to STA, please contact Ross or myself.

ASL has been providing funding to members for State-based activities such as seminars, and they are a great way for members to get together between congresses. I'd like to encourage members to continue to send requests for funding for new activities to the Executive, especially those states who have not yet taken advantage of the funds to hold an event for local members. Brief proposals can be sent to Richard Marchant or myself.

Wishing you all the best,

Belinda Robson

EDITOR'S REPORT

Welcome to the first ASL Newsletter for 2013 and the first for which I have had responsibility as Editor. As always, I find myself amazed at how quickly the new year has become the middle of the year, replete with bulging calendars, fresh deadlines and an urgency to make the most of experiences and opportunities. Needless to say, the gleaming chopper of a newsletter of which I fantasise, carrying us off on an evermore open road of fresh intellectual freedoms, is yet to materialise and so here, we continue our journey in the comfortable and robust ASL family sedan, so tenderly serviced by Ross Thompson for the past 7 years, albeit with a few new gizmos. Ross has a new baby now (Zachary Xavier Caron Thompson, born at 6.38 pm on the 7th of March, weighing 3.8kg and 53cm long), just one of the many achievements of our members so far in 2013. I hope you will enjoy reading about the many others in this issue...

....take it easy,

Sam

PS. Thanks to all of you who provided contributions for this issue. Please keep them rolling in...

NEW NEWSLETTER EDITOR:

Dr Samantha Capon

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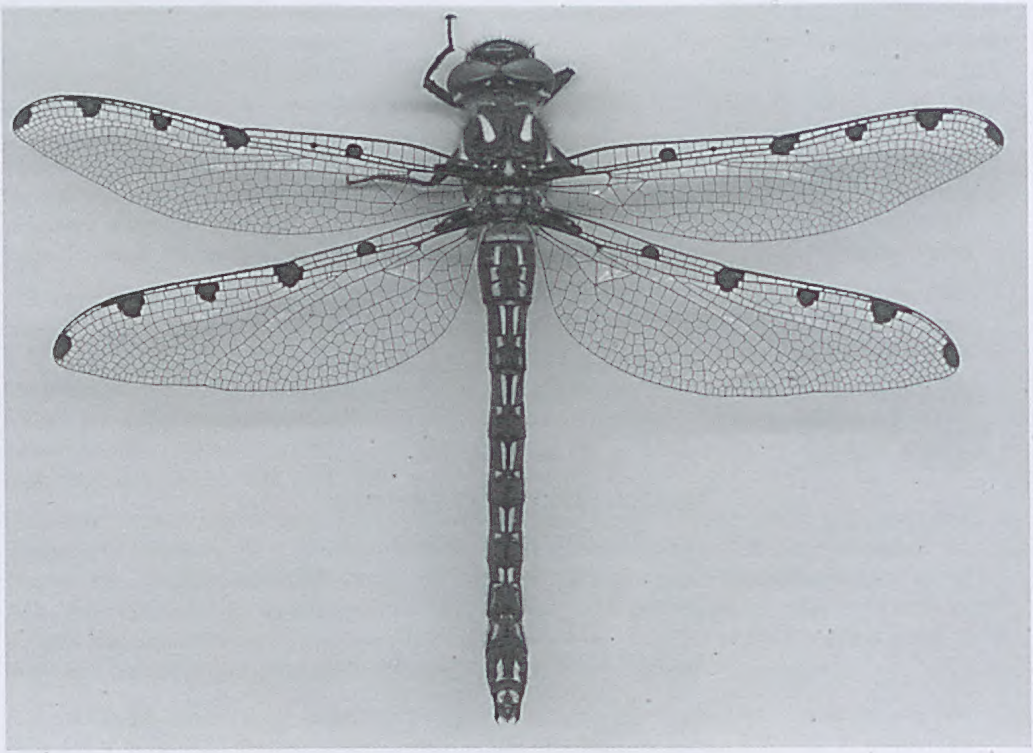
School of Science, Information Technology & Engineering (SITE)
University of Ballarat (Mt Helen)

PAGE 3 SPECIES

Inviting members to share their favourite limnological pin-ups....

In this issue, Alex Bush, a PhD student at Macquarie University and ASL student representative, introduces us to ***Austropetalia annaliese,*** a new species hiding in plain sight.



The previous two species of *Austropetalia* are restricted to highlands around mid-NSW down to Victoria, and roughly divided near Canberra between *A.tonyana* in the south, and *A.patricia* in the north. We know very little about either species which is surprising given how distinct they are. Now added top this picture is *Austropetalia annaliese*, recently described by Gunther Theischinger and given its lovely name after his grand-daughter. It is known from just one female specimen from Barrington Tops, NSW. It's amazing how such a large and mobile species can become isolated and remains unrecorded despite significant effort to confirm its status!

GENERAL ANNOUNCEMENTS

NSW ASL is having its first event!!!

Where: The Pumphouse Hotel, Darling Harbour near central Sydney.

More information about the venue here http://pumphousebar.com.au/

When: Tuesday 16 April 5.30pm – 7.30pm

What to expect: Planning, networking, talking limnology

All welcome (not just NSW members)!

Please RSVP to Gillian Dunkerley

Phone: 02 9995 5530

Email: gillian.dunkerley@environment.nsw.gov.au

APPLICATIONS FOR THE PETER CULLEN TRUST SCIENCE TO POLICY LEADERSHIP PROGRAM 2013 NOW OPEN

The Peter Cullen Water and Environment Trust is again looking for a diverse group of people who are actively involved in water system management to participate in our exciting leadership program.

Peter Cullen Trust
BRIDGING SCIENCE, PEOPLE & THE ENVIRONMENT

Only 15 people will be selected and funded to undertake this journey of personal and professional discovery.

For information and application forms, please see the Peter Cullen Trust Website: www.petercullentrust.com.au.

Applications close on the 30th April, 2013.

For information on sponsoring a participant from your organisation please phone Dr Sandy Hinson, CEO on 0407 589304.

ASL ASFB CANBERRA PUB NIGHT

5:45pm Wednesday 17th April 2013

Zierholz, University of Canberra

$10 (pay on the night) & includes light meal and **delicious** locally brewed **beer**

For more information contact - Evan Harrison : Evan.Harrison@canberra.edu.au

Register at http://aslasfbpubnight.eventbrite.com/

Speaker: Dr. Chris Fulton

Extremes in reefs and streams: dodging danger to find the fish

Peeking into extreme habitats can yield some powerful insights into what drives patterns of biodiversity over space and time. Through the possession of a novel attribute, or the extreme expression of an otherwise normal trait, extremophile species are able to exploit habitats where they are subject to extreme and often highly variable environmental conditions. But getting into these places as a human observer can be a real challenge, as we are far less adapted for a watery existence, let alone an extreme one! I will talk about my experiences observing fishes under extreme conditions and how this has helped to disentangle the mechanisms shaping the distribution and diversity of fishes across environmental gradients in both marine and freshwater ecosystems.

ASSISSTANT PROFESSOR IN WATER SCIENCE POSITION

UNIVERSITY OF CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

POSITION DESCRIPTION

Position Title:	**Assistant Professor in Hydrology/Water Science**
Faculty:	**Faculty of Education, Science, Technology and Maths**
Discipline:	**Environmental Science**
Reports to:	**Head, Environmental Science**
Appointment Level:	**Academic Level B/C**
Position No:	**53395**
Vacancy Ref No:	**130063**

POSITION PURPOSE:

The Discipline of Environmental Science provides education and conducts research in interdisciplinary environmental science and management with emphases on land and water management, vegetation and wildlife management, environmental chemistry, earth system science, conservation biology, and environmental genetics. Discipline staff conduct research and postgraduate training through the Institute for Applied Ecology. The IAE is a leading entity in the Murray-Darling Basin Futures Cooperative Research Network.

The appointee will join an interdisciplinary team of ecologists, chemists, water scientists, earth scientists and environmental managers to develop teaching and research in hydrology and/or water science, including water management, relevant to environmental science. The appointee will be expected to develop strong, collaborative teaching and research profiles in hydrology and/or water science. Ideally, the appointee will have experience in the science and practice of one or more of ecohydrology, groundwater, water management or related areas.

Duties:

We are seeking a dynamic, innovative person to develop, promote and conduct teaching activities and research in hydrology and/or water science in the environmental science program.

The successful applicant will have primary responsibility to design and deliver, in a team teaching context, the undergraduate subject Australian Waterways and at least one other subject in his/her field of expertise. The applicant may also be expected to contribute to teaching other subjects within Environmental Science in the area(s) of his/her interest, expertise and/or experience. He/she will also be required to contribute to expanding the Faculty's postgraduate offerings and short course programs.

The successful applicant will be expected to be research active and to build a profile of research, and postgraduate student supervision and related professional activity in his/her area of expertise and experience. The balance between duties in research and in

teaching will depend on success in securing external grants and the level of engagement with the Institute for Applied Ecology.

Specific duties required for this position are:

- Preparation and delivery of lectures, seminars, tutorials and practical classes for units in water science (including Australian Waterways and postgraduate units in water management), and related areas at undergraduate and postgraduate level, according to workload requirement for the position.
- Initiation and development of subject material for existing and new units in hydrology and water science at undergraduate and postgraduate levels.
- Convening relevant units and/or courses.
- Research and publication, including in collaboration with members of the Institute for Applied Ecology, other relevant research centres within the University of Canberra and with external organisations.
- Active participation in Institute seminars, workshops and other outreach activities
- Supervision of honours and postgraduate research students.
- Involvement in professional activity and liaison with key stakeholders inside and outside the University, including developing research partnerships.
- Marking and assessment.
- Consultation with undergraduate and postgraduate students.
- Attendance at relevant University, Faculty and Discipline meetings, and a role in relevant administrative activities.

SELECTION CRITERIA

1. Academic qualifications, at doctoral level, and professional experience in the field of hydrology and/or water science.
2. Demonstrated commitment to education and scholarship, including capacity to design, develop, coordinate and deliver innovative subject and course material in water science and/or hydrology.
3. Established record of research, analysis and publication in hydrology, water science and/or related areas. Please provide ISI-listed publications from 2007 until present, and a list of ten career best publications.
4. Potential to build collaborations with other staff in the Faculty and Institute for Applied Ecology, other University of Canberra research centres and external groups through the Murray Darling Basin Futures CRN.
5. Demonstrated ability or strong potential to secure research funding. Provide list of grants and income secured in the past five years.
6. Demonstrated capacity to work cooperatively as part of a team and to establish links inside the University and with outside organisations to build national and international collaborative research networks
7. Demonstrated effective interpersonal and communication skills.
8. Demonstrated understanding of, and commitment to implementation of equity and workplace health and safety principles.

AUSRIVAS course now enrolling

The AUSRIVAS Online training course is offered twice a year by eWater and the University of Canberra. The course aims to teach the skills and knowledge needed to assess river health to an acceptable standard using the Australian River Assessment System (AUSRIVAS) methods. Those who complete its requirements successfully are eligible for accreditation from the relevant state or territory agency.

There are no prerequisites for this non-award course, other than registration and payment. The theoretical knowledge required to use AUSRIVAS for river health assessment can be learnt entirely online in four interactive modules that can be completed at you own pace over 12 weeks. A 4-day practical face-to-face workshop is offered as a fifth module, teaching the practical skills required. The workshop module is held in Canberra (9th *- 13th December 2013) but **would you like us to hold a workshop in your state?** If there is sufficient demand from a group or agency we can arrange a workshop in any State or Territory.

If you would like to enrol in the course or any individual module please contact Sue Nichols- susan.nichols@canberra.edu.au or Evan Harrison- evan.harrison@canberra.edu.au for more information or queries regarding a workshop outside the ACT.

http://ausrivas.ewater.com.au/index.php/training-and-accreditation3/introduction

The RESCHEDULED 8th Waterbug Workshop

NEW DATES! Wed 10- Fri12th of July 2013

John got a real job ....but once his hair grows back we are good to go.....

The eighth Waterbug Workshop is intended for anyone with an interest in the taxonomy and ecology of freshwater invertebrates. We focus on the skills required to use taxonomic keys and laboratory equipment to enable participants to identify a wide range of invertebrate groups. The course material will include info on the ecology of the animals being studied, video footage, colour photographs and detailed schematics.

The course is based at Monash University and (gently) takes advantage of the hi-tech facilities in the teaching labs there. All the microscopes are wired into computers, and this allows the scope image to be displayed on a computer screen, which makes the process of pointing and arm waving infinitely simpler.

The course will allow practitioners with little to moderate experience to become proficient at waterbug identification to family level. Participants are encouraged to bring their own material to identify at the workshop...this will ensure the groups we cover are relevant to them.

The course is run over three days (Wed 10- Fri12th of July) at Monash University, Clayton, Victoria, and provides an intensive introduction / refresher to Family level ID.

The cost is $484 (including GST) and this includes course notes, forceps, morning and afternoon teas.

Numbers are limited to ensure a good student / teacher ratio.

Contact John Gooderham to register, email: flatworm@ozemail.com.au or

phone: 0447-893-519. More details available on the website(below) closer to the time .

Still not enough Bugs? Try - Death By Bugs!

Tuesday the 9th of July - 10am-4pm.

This intensive session can be whatever you want it to be. Priority is given to students and researchers struggling with Genus/Species level identification, but we also have people that simply want to sit down with a microscope and refresh their bug knowledge with help on hand. Bring your own bugs, or sit down to a lucky dip sample. Cost is $100 (why? ....I just reckon.)

If neither of these options appeals ...or clashes horribly? Give us a yell and we can tailor a training course to your workplace.... it'll probably cost heaps more though. Contact John: details above.

Love from

The Waterbug Company (John Gooderham, Edward Tsyrlin and Tom Sloane)

www.thewaterbug.net .....it's catchy.

Apply now for the $25,000 L'Oréal Australia & New Zealand For Women in Science Fellowships

Each year since 2007, L'Oréal Australia has offered three Fellowships to help early-career women scientists consolidate their careers and rise to leadership positions in science.

The three $25,000 Fellowships will be awarded to women who have shown scientific excellence in the five years since finishing their PhD, and are intended to help early-career women scientists to consolidate their careers and rise to leadership positions in science.

The one-year Fellowships can be used to help finance the scientific research of the Fellows, including equipment, reagents, consumables, travel expenses and conferences. The Fellowship may also be used for child care or hiring a research assistant to cover maternity leave.

Nominations are now open and close on 6 May 2013.

For full details of the eligibility criteria and how to nominate, go to http://www.scienceinpublic.com.au/loreal/applications.

To get a sense of the qualities expected of entrants into this highly competitive Fellowship, we encourage potential applicants to read the brief profiles of past recipients at http://www.scienceinpublic.com.au/loreal/fellows.

All the information on how to apply is online at http://www.scienceinpublic.com.au/loreal/applications.

The three Fellowships are valued at $25,000 and are open to women in Australia and New Zealand.

The For Women in Science Fellowships are supported by the Australian Academy of Science and the Australian National Commission for UNESCO.

If you have any queries, please don't hesitate to contact me atniall@scienceinpublic.com.au

UPCOMING CONFERENCES

International Society for River Science: 3rd Biennial Symposium
Achieving healthy and viable rivers

Monday, August 5-Friday, August 9, 2013
Beijing, China

http://www.2013isrs.org/

The 3rd Biennial Symposium of the International Society for River Science will be hosted by Beijing Normal University, Beijing, China.

Conference Theme

Faced with the degradation of riverine ecosystems across the globe, this conference focuses on the achievement of healthy and viable rivers with an objective of consolidating knowledge on riverine ecosystem response to the impacts of natural and human pressures, and promoting multi-disciplinary solutions for protecting or restoring the ecosystems. All the researchers, managers, and students in related fields, such as hydrology, water quality and aquatic ecology, are invited to share in the search for more effective and science-based solutions to maintain our important riverine ecosystems.

Important dates

- Abstract submission: Latest deadline - March 15th, 2013
- Confirmation of acceptance: Latest deadline - April 15th, 2013
- Conference date: August 5-9, 2013
- Full papers for submission to Special Issues of River Research and Applications: 25th September 2013

Papers and abstracts

- Selected papers will be published in a special issue of *River Research and Applications* (SCI, Wiley-Blackwell).
- A book of abstracts will be published before the conference with the full conference programme. Papers will be considered for both oral (15 minute) and poster presentations and posters by post-graduate students are particularly encouraged.
- There will be special poster sessions for post-graduate students with awards for the best presentations sponsored by Wiley-Blackwell, the publisher of our journal *River Research and Applications* and sponsor of the ISRS.
- Abstracts for oral presentations should be of up to 500 words plus two illustrations (figures or tables). Abstracts for poster presentations should be of no more than 300 words.

The 52nd Congress of the Australian Society for Limnology will be held from December 3rd-6th, 2013 at University of Canberra. The conference will be run over four days starting with the student workshops on Monday December 3rd. These workshops will include a session on how to write a journal article and a media skills workshop.

Conference theme

"From theory to practice in water science"

This theme was chosen as the conference will be held only a few kilometres from where decisions are made that shape water management in Australia. We will embrace the full spectrum of water science, from highly theoretical to highly applied and discuss our shared challenge of making excellent science an important part of political and management agendas. We will look forward to what water science can offer in the decade to come.

Keynote speaker

Professor Colin Townsend

Day 2 will open with our Keynote Address from Professor Colin Townsend (University of Otago), one of the world's pre-eminent aquatic ecologists.

The program for day 3 will feature the presentations by the ASL and Early Career Researcher Medalists, and contributed talks.

Mid conference excursion will showcase some of the local wetlands, rivers and wineries, or for the more nerdy, there will be additional workshop opportunities with training in AusRivas and an invertebrate taxonomy workshop.

Accommodation has been arranged across the price range from the local caravan park (recapture the spirit of ASL's past – stay in a tent during ASL 2013!!) to motels. Transport will be provided from the accommodation to the campus and all events.

Special conference event

Engaging with industry

The final day will be a special 'industry and agency engagement day'. We are offering day registrations to senior people from the political and management spheres. The afternoon sessions will showcase the very best of ASL in a series of invited half hour presentations, followed by a 'meet and greet' mixer.

The conference will close with the traditional conference dinner and associated festivities.

Watch for updates on the asl website (www.asl.org.au) and on the ASL facebook site (http://www.facebook.com/groups/australiansocietyforlimnology/). Enquiries can be directed to ASN Events (jm@asnevents.net.au) or the local organising committee

We look forward to welcoming you to Canberra in December.

Ross Thompson, Chair, Local Organising Committee

STUDENT ANNOUNCEMENTS

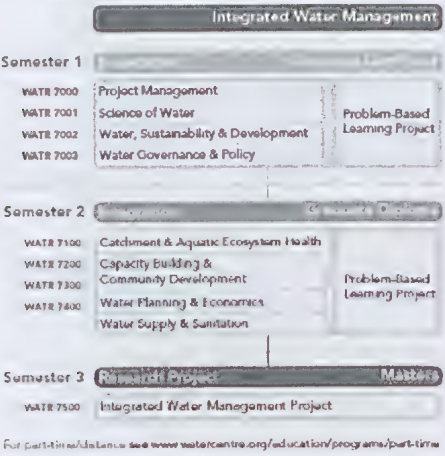
INTERNATIONAL WATERCENTRE

Master of Integrated Water Management

Graduate Certificate and Graduate Diploma
Full-time and part-time/distance

In the complex world of climate change and population growth, water professionals can no longer focus on a single aspect of water management. Solving water-related problems requires technical and scientific expertise and greater understanding and integration of environmental, social and political factors.

Program structure (Full-time)


Integrated Water Management
Semester 1
WATR 7000 Project Management
WATR 7001 Science of Water
WATR 7002 Water, Sustainability & Development
WATR 7003 Water Governance & Policy
Problem-Based Learning Project
Semester 2
WATR 7100 Catchment & Aquatic Ecosystem Health
WATR 7200 Capacity Building & Community Development
WATR 7300 Water Planning & Economics
WATR 7400 Water Supply & Sanitation
Problem-Based Learning Project
Semester 3
Research Project
Masters
WATR 7500 Integrated Water Management Project

For part-time/distance see www.watercentre.org/education/programs/part-time

Qualification from four leading universities

Students enrol at The University of Queensland (Brisbane). The program is managed by IWC and delivered by lecturers from all IWC member universities. Upon graduation students receive a co-badged qualification.

Griffith

Three of our member universities are ranked in the top 100 universities of the world in the Times Higher Education World University Rankings.

Great incentives to enrol

- Field trips (Western Australia, Stradbroke Island and others) are included in the tuition fees.
- Masters and Diploma students receive $1,000 toward professional development.
- Masters students also receive up to $1,000 to support their third semester project.

Practical and applied components

The program builds on students' professional experience to approach water-related problems holistically

- **Lecture modules** teach knowledge and skills across a wide range of disciplines.
- **Team projects** allow students to apply their knowledge to real case studies in Australia and overseas.
- **Field visits** throughout Australia complement project work and give students first-hand water system experience and knowledge.
- **Network building** encourages students to establish links through the IWC's network of national and international specialists.
- **Skills development** allows students to gain practical skills to analyse and solve water-related problems.

Our graduates will acquire

- **Communication skills** across disciplines and sectors, and sciences and policy
- **Systems thinking skills** for the whole-of-water cycle
- **Collaboration skills** for cross-sectoral teamwork
- **Problem-solving skills** for complex issues requiring difficult tradeoffs
- **Risk assessment and planning skills** to devise sustainable solutions
- **Adaptive and reflexive learning skills**, i.e. an ability to learn by doing and applying context-specific solutions.

Paul Greenfield, AO
Vice-Chancellor
The University of Queensland

There are no courses in Australia, and very few internationally, that take such an integrated approach to teaching and learning about water management.

www.watercentre.org

REGIONAL REPORTS

ASL Darwin chapter first meeting

Amy George (SSD) and Erica Garcia (CDU) organized the inaugural ASL Darwin chapter meeting on February 28th at the offices of the Supervising Scientist Division. Thirteen people attended with nearly that many interested but unable to attend on the day. It provided a great opportunity for the top-enders since many folks had never meet before. Certainly, in the NT it has been rare that aquatic scientists from the university, government and consultancies get together to discuss what they are working on and build collaborations. This was a general meeting to discuss the future of the chapter and get to know each other. Another meeting was planned for late March be held at the Trailer boat club with 2 speed talks (~ 10 min) and then general aquatic discussion to follow at the pub!

Erica Garcia

News from South Australia

Chris Madden (consultant at Freshwater Macroinvertebrates) presented an ***"Identification Key to Families of Diptera Larvae of Australian Inland Waters"*** at the Aquatic Macroinvertebrates Taxonomic Workshop at La Trobe University, Wodonga Campus in February. Organisation of the workshop was one of Phil Suter's last official duties before retiring. A range of invertebrate groups were covered during the workshop. Michael Shackleton of La Trobe University presented a key to the Calocidae (Trichoptera) larvae and David Cartwright, Alice Wells, John Dean and Ros St Clair joined with Michael to summarise the taxonomic status and distribution of the caddisflies (Trichoptera) in Australia, with a review of publications in the period 1982 to 2012. Winston Ponder of the Australian Museum provided a mountain of information on freshwater Gastropoda including some recent taxonomic changes based on molecular studies. Rob McCormack provided a key to Australian Spiny Crayfish (genus *Euastacus*) based on his excellent book on the same subject published by CSIRO. Finally, Kim Sewell of the University of Queensland produced a key to the genera of temnocephalans, which are symbiotic on freshwater crustaceans (particularly crayfish). Kim's talk included some great film of these little studied animals. Despite retirement, Phil Suter has agreed to continue organising the annual workshops at La Trobe in Wodonga (with support from the administration) and we look forward to next year's instalment.

Chris Madden

In times gone by.....

an irregular series by Brian Timms

Episode 1. NO TRESPASSING

Wind back the clock to September 1972 and come with me to Tasmania. I was in my last year of Ph D candidature at Monash. My project was a limnological comparison of three maars (deep pudding basin shaped volcanic lakes) with special reference to salinity, one being fresh, another hyposaline and the third hypersaline. The benthic community of the freshwater lake seemed odd when compared to overseas lakes of the same size and depth, so I was after data on other Australian lakes to confirm this. In those days no one knew much so I had to get the data myself.

Hence I organized a trip to Tasmania to study Dove Lake, Lake St Clair and others, but I needed a companion. Jon from Melbourne University was looking at the genetics of chironomids and was helping me with identifications of these difficult beasts, and he needed material from Tasmania. So we combined, a mutually beneficial arrangement.

In driving along a road near Launceston we spied a farm dam that Jon thought might be a good site, so we drove up and down the road looking for a house to get permission, but to no avail. So we jumped the fence and Jon was nicely into his waders in the dam when along came a police car. The driver turned on his flashing lights, stopped and beckoned us to the fence. He wanted to know why we were on private land without permission and why we had not seen the 'No Trespassing' sign. Just then I saw it behind a bush and said it was not visible from the road and that there were no houses around to enquire. We were told not to be smart-alecs and that he was taking us to the owner who would surely press charges and we would be in big trouble. So off we went following the Sergeant to a big imposing mansion 7 km along the road and 3 km off it.

The lady of the house, who we shall call Mrs Pompous Uppercrust as it seemed to suit her demeanor, greeted her apparent good friend the Sergeant, who told her with glee about these two helpless felons found on her land. To our improving luck she decided we all needed a cup of tea so we were invited inside to the Drawing Room. She asked Jon what he was doing in her dam, to which he replied the he was catching chironomids in order to study their chromosome inversions. This explanation completely escaped her, but Jon noticed she seemed itching to show us her nick-naks on the sideboard, so Jon causally asked about one. Off she went at a tangent with a great long explanation, while the Sergeant cooled his heals. In the meantime tea was served by old bloke who could have been a butler. Mrs Pompous then turned to me with a similar question and I started by saying I was from Monash University, but that is all I got out, as she exclaimed that this university had the audacity to fail her son last year in first year science. Actually I think I may have been responsible as I was in charge of first year practicals and I remember a couple of blokes who didn't bother to come after the first two sessions, so I kept deadly quiet about this. I successfully turned the conservation to her art work on the walls, which was amazing considering my abysmal knowledge of art. But she had a copy of Tom Robert's "Shearing of

the Rams,' one I knew about. So off she went on another 'show and tell,' while the Sergeant cooled his heals. By this time I thought he should be referred to as Sergeant Patient Charger, but I did not want to upset him so I kept quiet; besides Mrs Pompous had the floor.

Eventually she ran out of talk about her art and turned to Jon again and, somehow remembering the word 'chiromid (sic),' asked what good they were. And Jon, bless his soul, was quick to say they were good indicators of water pollution. This touched a chord as the Esk River flowing through her estate was polluted and this worried her. The long and short of further conservation was that we were welcomed as heros and given permission to go where we wanted to on her land and to catch as many chironomids as we needed. The Sergeant was visibly upset with this decision and told us on our departure that he had charged many a person for trespassing on her land and the court had not been lenient with them. He made sure we knew we had wasted 90 minutes of his time.

We went back to the farm dam and caught a swag of chironomids. Later that afternoon we were driving into nearby Longford when I heard a police siren behind me. I was pulled over and charged by the same Sergeant for resting my arm on the window sill as I drove, a very dangerous practice I was told. So Sergeant Patient Charger got his man, in Canadian Mountie tradition.

VIRTUAL ASL

Our student representatives would like to see more evidence of how busy you are and invite all members to submit photos of their recent (or ancient?) field exploits to the ASL Facebook page. For those of you to whom 'syncing' conjures up images of the Poseidon or quicksand, a selection of these will also be presented in each issue of the newsletter.

"By all means embellish your stories from the field with tall tales of the one that got away and the local "customs", but where's the proof?

If you have photos from fieldwork we'd like to see them!"

" This picture takes pride of place on my wall at home. We did a media release in 2011 asking locals to report turtle sightings and I only had two photos of me and an Oblong turtle (*Chelodina colliei*) at the time. This photo it made it into the local newspapers..."

Caitlin Bartholomoose

"Petalura gigantea, a special and massive dragonfly and a real bugger to find!"

Alex Bush

Please 'friend' us on Facebook.

If you aren't on Facebook, here is the incentive you have always needed to join!

Click here to go to Facebook now.

MINUTES FROM ASL EXECUTIVE TELECONFERENCE

11th February 2013

Present: B. Robson, R. Marchant, C. Leigh, R. Magierowski, E. Garcia, F. Sheldon, A. Bush, E. Harrison, S. Hatton, T. Mackintosh, C. Batholomaeus, ASN (Jacqui, Simon and Emily)

Apologies: D. Ryder, R. Lester, G. Dunkerley, J. O'Connor, D. Cortez, M. Bald, B. Downes

1. 2014 Congress in Darwin: This will be a joint congress with the Aust. Society for Fish Biology. It will be held in the week Mon 30 June to Friday 4 July. Estimates of the number of likely ASL delegates are 100-150. One problem is that the congress overlaps with the end of the financial year and thus auditing of accounts for presentation at the AGM may be difficult. However, R. Lester (treasurer) believes auditing will be possible provided enough notice is given. Another problem is the division of costs between the two societies. It was recommended after discussion that costs should be split equally, rather than be based on relative numbers of delegates from each society. E. Garcia (NT rep) will provide updates to the ASL executive on progress with the organisation of this congress.

2. 2013 Congress in Canberra: ASN reported that the first week of December has been chosen for this meeting, which will be held at the University of Canberra. Some accommodation has been secured but university housing will not be available. It is not clear whether lecture rooms have been booked but E. Harrison will discuss this matter with R. Thompson this week. No plenary speakers have been invited yet nor have any student activities been planned. T. Mackintosh (student rep) will email other student reps about organising student sessions.

3. STA rep: R. Thompson has volunteered to be the ASL rep for STA. B.Robson indicated that a position on the ASL executive needed to be created for the STA rep. This was agreed.

4. Lungfish chapter: J.Davis and J.Chambers sent a proposal to the executive for the formation of a Lungfish Chapter within the ASL, which aims to enable older members 'to maintain an active involvement with ASL and provide leadership and mentoring of junior and mid-career members'. Student reps (A.Bush, T. Mackintosh) thought that this would be very valuable for younger members. B. Robson will write to J. Davis and J. Chambers agreeing to their proposal, allowing them a position on the executive and space in the ASL newsletter for publicising activities.

5. Proforma for funding: the last executive realised the need for a formal mechanism for funding limnological activities by members (other than running state based meetings e.g. pub nights). An application form needs to be designed and B.Robson asked the executive for ideas about the sorts of questions that applicants should answer. It was suggested that proposals should be consistent with the aims of the ASL, should show how they will benefit the society and must deal with topics that can be precisely specified. Vague or open-ended proposals should not be funded. B. Robson will circulate a list of such questions to the executive for approval.

FROM THE ARCHIVES....

Recollections and ruminations from long-standing ASL members:

snips, slips, quips and tips

This issue, we hear from **Tim Doeg**, Private Consultant (since 1998) and previously with the Museum of Victoria, University of Cape Town and the Department of Sustainability and Environment (and many of its previous incarnations).

Year first joined ASL: 1979

First and most recent ASL conference attended:

My first conference was at Tallangatta (1979). I was doing Honours in Zoology at Monash (under the influence of Sam Lake – which might explain a few things). The most recent was at Armidale in 2012.

Of the 34 conferences from 1979 to 2012, I have attended 27 or 28 of them (Canberra 1989 just doesn't ring a bell). Especially now as a lone consultant with no affiliation, the conferences are a very important part of my year. A chance to catch up with old friends, a chance to chat informally about limnology (on a day to day basis, our two dogs here don't really have much to contribute), and a chance to see what is happening across the country. Another nice thing about being to so many conferences is to watch new students arrive and over the years grow up (both in confidence and in a limnological sense) and develop. The future is in good hands, I think.

Snips (what floats your boat/ fires you up limnologically)?

Reading an original scientific paper and seeing the practical applications of the results is something I get quite a buzz out of - where scientific research and "management" limnology intersect. When you can point a manager at a seemingly esoteric scientific paper and describe why that piece of work has some direct relevance to what they are trying to achieve (and as an educational exercise – why they should support the more pure branches of science). Often, these are relatively small connections, but have larger implications.

A neat example I often use: In 2003, Paul Reich and Barbara Downes published a paper called "The distribution of aquatic invertebrate egg masses in relation to physical characteristics of oviposition sites at two Victorian upland streams". Interesting, but practical applications? Part of the results found that invertebrate egg masses are found predominantly on the wetted portion of rocks that emerge from the water surface, and eggs of different species were found at different points under the water on these rocks. Now, take this into an environmental flow assessment and it means that at certain times of the year (when these animals are breeding), the flow needs to be low enough to expose the surface of the rocks, but not too low as to leave too little wetted portion for the diversity of invertebrates that use these rocks. Environmental flow officers are often trying to get as much water for the environment as they can, but this type of science can be used to demonstrate the importance of not needing too much water at certain times – which of course leads into the discussion on flow variability and its implications that have very practical applications.

It's translating science for non-scientists (and seeing that they "get it") that I find very satisfying.

Slips (serendipitous moments or valuable lessons gained from unintentional bloopers/ accidents encountered over the course of your membership):

Leon Barmuta and I both blame each other. The newsletter editor (Jenny Davis and team) was resigning and a new editor was required. Whatever happened, one of us said "let's do it", and ASL may have realised their mistake when our first edition came out in July 1990 with the opening editorial:

"Do not adjust your Newsletter. ..... We have taken control. ..... We are friendly (mostly)."

What followed was over 2 years of dedicated hard work – in those days, to produce the newsletter, we had write our own jokes, re-type stuff sent as hard copies, insert various bits of text that arrived on floppy disks, print out the text pages leaving spaces for photos, actually glue photos in by hand into spaces hopefully the right size, plagiarise various Larson cartoons, and then take the whole hard copy thing to the printers, collect the boxes of copies once they were printed, then stick each one in an envelope, put sticky name labels on them, bundle them into postcode groups (a requirement of Registered Post) and take the whole lot to the Post Office.

However, some may say it was two years of complete rubbish, possibly culminating in the "I killed Elvis" cover in March 1992 (not one of mine, I believe, Leon). And just scanning through some old newsletters from that period for this contribution .... well .... some might be half right. But remember, the early 1990's was when the drugs from the 70's and 80's got really, really good, and red wine producers started to make some mighty fine vintages!

The valuable lesson – always check volunteers out thoroughly before you give them any important task.

Quips (earliest ASL-related memory that amuses and/or inspires you, or that you just can't shake):

Too many to mention all of them, but who could ever forget David Mitchell Scienceman? At the Albury Conference (the 1997 one I think), the organisers received a registration in the name of David Mitchell Scienceman. At the time, Dr David Mitchell was a senior member of the society (he was even President in 1982), so it was assumed to be a scam registration, put in by his friends. When the real David Mitchell Scienceman (let's call him "DMS") turned up at the registration desk, there was a flurry of activity to get his name tag and papers in order. At the time, DMS was unknown to everyone in the society, but apparently (according to him, that is) had done many wondrous things in limnology. He also managed to get himself interviewed in the local paper during the conference – the only mention of the society in the news while we were there.

Another thing that I just can't shake is arriving at the first conference in Tallangatta, walking into the welcome drinks, seeing the big names in limnology at the time in various states of sobriety and realising "Hey, I might like this society."

Tips (advice you have, of any sort, for newer ASL members):

ASL members are very generous people. I remember when I first started as a consultant and was writing laments on the experience for the ASL Newsletter. At one conference soon after, Bill Williams (that's *the* Bill Williams) tapped me on the shoulder and offered any help he could provide if I needed advice on how to run a consultancy (I never had any connection with Bill before that). And at a recent conference I watched Andrew Boulton spend his entire morning tea talking to a young overseas student (whom he didn't know) about publishing papers and the best way to go about making sure her work was suitable. Such generosity with time, and desire to help, is a touching characteristic of many ASL members.

My advice to newer members is never be afraid to approach the "big names" with questions or ask for advice. Don't be intimidated. They will (almost invariably) take the time to answer. All the "older" members can still remember being young new members, not quite sure about things. And remember, one day you will be an "older" limnologist, so always take the opportunity to help those newer than you.

A call for contributors!

Are you a longstanding member of ASL? We'd love to hear your stories!

If you'd like to contribute to this section (or you think we could talk you into it), please email Cath (c.leigh@griffith.edu.au).

HIGH PROFILE LIMNOLOGY

This section will highlight high profile papers from limnology that have appeared over the last year and which have an ASL connection. Please feel free to nominate papers, books or reports for this section. Inclusion will be at the Editor's discretion. ED.

In keeping with the last issue of the Newsletter, and due to a lack of contributions for this dubiously named section, I too have taken this opportunity to gratuitously promote my own paper (although at least there are a few other ASL members in the rather lengthy author list). Since my new duties as Editor are likely to preclude any further publications this year, I hope a few of you will provide some nominations before June! (ED)

Ecosystems
DOI: 10.1007/s10021-013-9656-1

ECOSYSTEMS
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Riparian Ecosystems in the 21st Century: Hotspots for Climate Change Adaptation?

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Abstract

Riparian ecosystems in the 21st century are likely to play a critical role in determining the vulnerability of natural and human systems to climate change, and in influencing the capacity of these systems to adapt. Some authors have suggested that riparian ecosystems are particularly vulnerable to climate change impacts due to their high levels of exposure and sensitivity to climatic stimuli, and their history of degradation. Others have highlighted the probable resilience of riparian ecosystems to climate change as a result of their evolution under high levels of climatic and environmental variability. We synthesize current knowledge of the vulnerability of riparian ecosystems to climate change by assessing the potential exposure, sensitivity, and adaptive capacity of their key components and processes, as well as ecosystem functions, goods and services, to projected global climatic changes. We review key pathways for ecological and human adaptation for the maintenance, res-

Received 27 July 2012; accepted 19 February 2013

Author Contributions: SC: lead author, conceived study, performed research, contributed new models, wrote paper. LC: conceived study, performed research, contributed new models, wrote paper. RMC: contributed new models, wrote paper. RN: contributed new models, wrote paper. PD: contributed new models, wrote paper. JM: performed research, wrote paper. JP: performed research, contributed new models, wrote paper. MR: performed research, contributed new models, wrote paper. TC: contributed new models, wrote paper. MD: performed research, wrote paper. JC: performed research, wrote paper. DB: performed research, contributed new models, wrote paper. MS: performed research, wrote paper. JR: performed research, wrote paper. MP: performed research, wrote paper. SW: conceived study, performed research

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Published online: 13 March 2013

REPORTS FROM THE TRENCHES

Griffith UNIVERSITY
Australian Rivers Institute

Recently our director **Stuart Bunn** gave a talk at the "Lake Eyre basin under the spotlight" conference in Longreach (25-27 February). He has also just participated in the Asian development bank's conference "Asia water week: securing water for all", and is now in China to lecture followed by another series of lectures in Sweden at the Swedish University of Agriculture Sciences.

Congratulations to **Wade Hadwen** who just snagged a new grant, through the AusAID Development Research Award Scheme (ADRAS) to tackle the thorny issue of "Climate change and water supply and sanitation on atolls and flood-prone catchments in the Pacific". In this project, with partners from the International Water Centre, Monash and UQ, they will develop a framework that will enable communities and water managers to navigate from understanding impacts of climate change to evaluating adaptation options for water supply and sanitation. The case study areas are Solomon Islands, Marshall Islands and Vanuatu. Wade's project will run for three years from 2013 and he'll need to find a post doc willing to travel throughout the South Pacific! Not bad huh?

Welcome to: Dr Sue Jackson, who has joined ARI as a Principal Research Fellow from 1st February. Most recently a Principal Research Scientist at CSIRO Ecosystem Sciences and a member of the Scientific Advisory Panel for the Lake Eyre Basin Ministerial Forum, Sue will continue to work out of Melbourne. Sue will be working on the NERP program and Murray-Darling Basin projects, among others.

Also welcome to several new post docs including **Lorenzo Cattarino**. Lorenzo is working with **Simon Linke**, **Mark Kennard** and **Virgilio Hermoso** (ARI) and **Josie Carwardine** (CSIRO) on the ARC project "Systematic planning beyond conservation: a multi-objective, multi action framework for sustainable biodiversity. The projects aim is to develop a framework for prioritizing management actions for freshwater biodiversity conservation in a way that maximizes the returns for biodiversity, while minimizing costs and socio-economic impacts. By addressing an important limitation of traditional conservation planning approaches, this project seeks to identify priority management actions, as well as indentifying where these should be implemented, especially dealing with financial and socio-economic constraints. The framework represents a novel approach in conservation planning that will greatly improve the effectiveness of freshwater biodiversity management and conservation.

Other new additions are: Dr Cristina Barron, working with **Guillermo Diaz**. Cristina comes to us from the University of Cadiz in Spain and will be working on the ocean acidification effects on coral fees under Guillermo's ARC project. **Heather Haines**, a new RA who will work on **Jacky Croke**'s ARC Linkage "The Big Flood -

will it happen again?" Heather studied her undergrad and Masters at the University of Western Ontario in Canada.

HDR comings and goings:

As usual our PhD students are showing that they have no fear of hard work **Sofie Bernays** has spent three months in the hot tropics dragon hunting and as she has had trouble finding them it looks like she'll have to do it all again next season too. **Charlotte Hurry** has been making special traps in an effort to get at those burrows dwelling crayfish and is due out in April to catch herself some crays. Whilst many of our most loved PhD Candidates are nearing the end of their projects and are putting some serious thought into ~~procrastinating~~ writing up their thesis, including: **Laurisse Frampton**, **Andrew Bentley**, **David Sternberg**, **Iris Tsoi** & **Alexandra Garzon**.

Charlotte Hurry

Murdoch Aquatic Ecology Group

Murdoch UNIVERSITY

Ed Chester, Kerrylyn Johnston and Belinda Robson were about to join Ty Matthews from Deakin Uni in a field trip looking at post-flooding effects in the Grampians when it all caught fire! Postponed a few weeks, now they will also be looking at post-fire effects too. Belinda Robson and Jane Chambers are in the thick of drafts of the book - the second edition of Australian Freshwater Ecology. The two NCCARF funded projects are winding up and Jane and Gaia Nugent are heading off on a road show trip around the country to present the results and the framework for managing climate change adaptation for groundwater dependent ecosystems.

Peter O'Toole has been collecting vegetation to find the role they have in nutrient movement, designing a column experiment to assess the impact of a rising and falling water table has on nutrient concentrations and analysing results. Caitlin Bartholomaeus, who is studying freshwater turtles (*Chelodina colliei*); has just finished off her turtle trapping. She has caught over 250 turtles and is now working hard to analyse all of her data. Robyn Paice has been monitoring the growth of *Potamogeton crispus* within and outside protective cages amidst a severe algal bloom. Surprisingly it grew quite extensively then began to decline outside the protective cages in late February and has now disappeared from these areas, while it has remained at 50-100% coverage within caged areas. Kirsi Kauhanen has been continuing with quarterly sampling runs at the Capel Wetlands Centre to capture seasonal changes in the phosphorus storage and cycling dynamics of a wetland impacted by municipal wastewater release as well as two unimpacted wetlands. It has been the first year of wastewater release over the hot and dry summer season, and one of the positive outcomes observed has been the maintenance of surface water habitat in a wetland that has been drying up as a result of climate change. Scott Strachan has been sorting through mud looking for bugs in the micro refuges of wetlands, he has also been working hard writing his first paper for publication and he bought a boat.

Murray Darling Wetlands Working Group Ltd.

Effective 20 November 2012, Murray Darling Wetlands Ltd. changed its name to Murray Darling Wetlands Working Group Ltd. This name change results from a merger of Murray Darling Wetlands Ltd. with its partner NSW Murray Wetlands Working Group Inc. While our name has changed slightly, our staff, legal status, office addresses and contact details remain the same and the Company's business remains fundamentally unaffected. On 7 March, we launched our new website www.murraydarlingwetlands.com.au. With a new Company name, new logo and new website we have also produced a new look e-newsletter *Wetlands Unlimited*. Four editions will be published per year on a seasonal basis. If you would like to receive *Wetlands Unlimited*, please go to our Website/News & Media/Newsletters/Subscribe and submit your email address.

The future options for potential water regimes and management of Bottle Bend, being coordinated by **Deb Nias,** is a partnership project with the former Lower Murray Darling CMA (part of that catchment is now absorbed by Murray CMA) and the Working Group, with the final report due in April 2013.

Rhonda Sinclair is also coordinating a partnership project with the former Lower Murray Darling CMA. The engineering assessment and costings of structures (road crossings and the two fixed crest concrete weirs) on the Carrs, Cappitts and Bunberoo (CCB) Creeks system (located between Locks 8 and 9 on the NSW side of the Murray River) is to improve flow management, wetland connectivity, ecological condition and fish passage. The contract was awarded to NSW Public Works (Heath Robinson) in association with Fishway Consulting Services (Martin Mallen-Cooper), with the final report due in early April 2013. Iain Ellis (MDFRC) and Clayton Sharpe (CPS Environmental Research) have completed the spring 2012 fish survey on the CCB Creeks system for the NSW Office of Water. A comparative report between the autumn and spring 2012 fish surveys of CCB, describing the overall assemblage and population structure, has been prepared.

Sarah Ning has been busy attending numerous events to promote the Murray CMA's Murray Wetland Carbon Storage Project, including a presentation to the Murray Lower Darling Environmental Water Advisory Group; attending the International Centre for Excellence in Water Resources Management 3rd Australian Water School in Sydney; and participating in the 2013 Carp-O-Mania event. Coordinated by the Murray and Goulburn Broken CMA's and held on the banks of Lake Mulwala on 24 March, the Carp-O-Mania event showcased a number of hands on activities for children including the Working Groups' frog egg creation exercise.

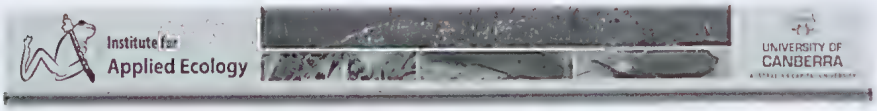
The Murray Wetland Carbon Storage Project is now in the phase of assessing wetlands in the NSW Murray CMA catchment to assist in selecting priority sites for on-ground investment through the project's incentive program. The incentive program will be launched in July or August 2013 and will provide opportunities for landholders to increase their wetlands' carbon storage capacity.

Cheers,

Rhonda Sinclair

Institute for Applied Ecology Freshwater Laboratory

University of Canberra



Preparations are well underway at the University of Canberra for the 2013 ASL conference in December (3rd-6th). We have confirmed that Professor Colin Townsend will be the keynote speaker and look forward to a great turnout. Other features will be an 'industry engagement day' to see if we can get senior people from Canberra-based agencies along. For more information contact Ross Thompson (ross.thompson@canberra.edu.au)

The ACT seminar nights being held at Zierholz @ UC (you will all get to experience this great bar at the ASL conference) in conjunction with the Australian Society for Fish Biology are also continuing to be successful. The most recent seminar was given by **Dr Brad Sherman** from CSIRO Land and Water on cyanobacterial bloom dynamics and management. The next seminar is coming up on the 17th April and will be given by **Dr Chris Fulton** from ANU on "Extremes in reefs and streams: dodging danger to find this fish". For more information contact Evan Harrison (Evan.Harrison@canberra.edu.au)

Ross Thompson has arrived at Canberra to take up the Chair in Water Science position, bringing with him PhD students **Adrian Dusting** and **Alissa Monk** and research assistant **Laura Caffrey.** Ross will be continuing his work on revegetation scenarios in the Goulburn catchment and beginning his Future fellowship project on assembly processes in central Victoria chain-of-pools systems. In the meantime he is finishing up the NCCARF work from Monash which he undertook with **Paula Sardina**, who has now returned to Argentina. Ross is also very happy to announce the arrival of Zachary Xavier, who was born on the 7th of March.

Fiona Dyer, Evan Harrison and **Sue Nichols** are starting a project in conjunction with Waterwatch ACT to assess to quality of Waterwatch data and how well the data compares to data collected for AUSRIVAS assessments. The results of the project will be interesting given that Waterwatch and AUSRIVAS assessment are widely used to assess river health throughout the country.

Anthea Florance and **David Sangston** have both started their honours project supervised by **Fiona Dyer** and **Evan Harrison**.

Anthea's project is supported by ACT Parks and is determining how macroinvertebrate communities have recovered from drought, fire and flood disturbances in the Lower Cotter River Catchment (one of water supply catchments for the ACT). Her project will provide information to ACT Parks on how river health in the catchment has recovered since the 2003 fires and more recently flooding. While David's project is determining the size and distribution of natural habitat barriers for Murray Cod movement in the ACT section of Murrumbidgee River. The results of his project will feed into understanding how water abstraction by the Murrumbidgee to

Googong water transfer will affect Murray Cod movement. Dave has spent many hours hiking into the more remote sections of the Murrumbidgee River for his project!

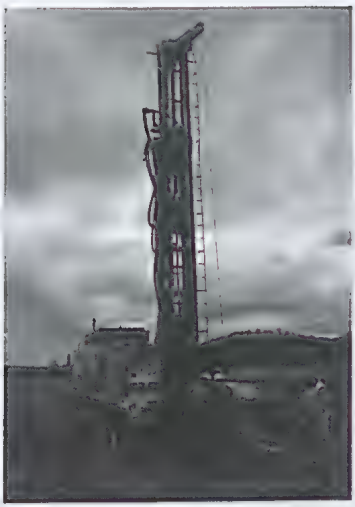
Duanne White and **Evan Harrison** have been undertaking a project investigating the geormorphology of the Jerrabomberra Wetlands at the top of Lake Burley Griffin (see photos). The wetlands contain several geomorphic features of conservation value, including paleochannels and a large sand dune. Information from this project will contribute towards the Jerrabomberra Wetlands management plan.

The NCCARF funded project to predict the water quality and ecological consequences of a changing climate in the Upper Murrumbidgee Catchment led by **Fiona Dyer** has come to an end. The project team included **Paloma Lucena-Moya, Evan Harrison, Jarrod Kath, Sondoss El Sawah (ANU), Trefor Renoyldson, Tony Jakeman (ANU), Barry Croke (ANU), Renee Brawata, Alica Thschierchke, Sally Hatton and Rachael Griffiths (ANU).** The project has been highly successful in terms of identifying thresholds of ecological response for macroinvertebrate communities and building a modelling framework to predict the water quality and ecological consequences of a changing climate. A big thank you to **Paloma Lucena-Moya** who put a lot of hours into the project and has made a large contribution to our group. Paloma now returns to Europe and will be missed – good luck for the future Paloma!

The MDBfutures CRN project 'Using an evidence-based approach in the optimization of water allocation decisions' is progressing well. **Sue Nichols** and **Sue Powell** are developing a 'proof of concept' eco-hydrology model for integrating ecological models of terrestrial vegetation encroachment with 'Source' flow models and irrigation extraction. This work is in collaboration with eWater's **Geoff Adams** and University of Melbourne's **Mike Stewardson** and **Angus Webb**. A parallel project in the Upper Murrumbidgee working with eWater, ACTEW and Charles Sturt University's **Wayne Robinson**, seeks to optimise flows regarding the responses of key ecological indicators such as macroinvertebrates and fish while considering water supply demands for Canberra. These projects make use of existing scientific knowledge derived from experts, published research and statistical relationships obtained from data previously collected for monitoring and assessment.

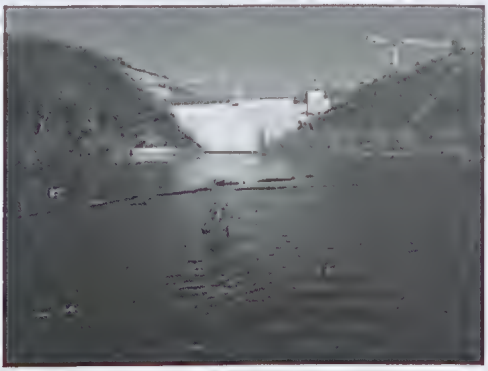
Sally Hatton's PhD is well underway now with her currently spending many a night in the field setting nets for the endangered Macquarie perch and trout in Cotter Reservoir, taking water quality measurements and bug samples to investigate the change of diet as the new dam is in its initial filling stage (see photos). **Veronika Vysna** went to "Europe" to explore the winter rivers of northern Slovakia, where otters play on ice and make a lot of noise. She was ice-skating on frozen fish ponds of the Czech Republic (aquaculture is big there) - there she saw a frozen carp in the pond, as not every carp is lucky enough to make it to the Christmas table ! Then she went for a summer holiday to Hawaii, Big Island, where the landscape is geologically so young that hardly any rivers "exist" there, yet. So she used this opportunity to learn about the beauties of marine life – swimming with manta rays, sunbathing with green turtles, whale watching (some baby humpbacks were observed to spend more time in the air (jumping) as they did in water) and snorkeling. Now she is back in her PhD office trying to make sense of all the cotton strip results.

Evan Harrison

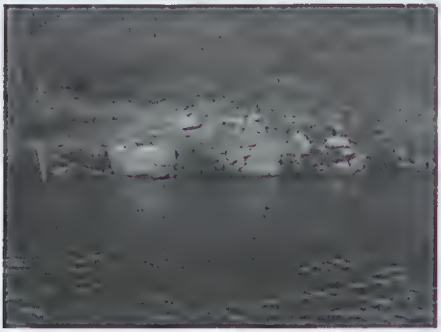


Investigating the geormorphology of Jerrabomberra wetlands- the easy way with a drill rig (above left) and the hard way with a hand auger (above right)!

(Photos- Evan Harrison and Jane Roberts).



The nearly completed Enlarged Cotter Reservoir (above) and setting gill nets for Macquarie Perch in Cotter Reservoir (below). Photos: Sally Hatton.



Monash

We said goodbye to **Ross Thompson** and we wish him well in his new role as the Chair of Water Sciences at University of Canberra. More departures include **Alissa Monk, Adrian Dusting** and **Laura Caffrey** who will be joining Ross in Canberra and we wish them all well.

The Freshwater Group has now been rebranded as the **Limno Lab** and incorporates both **Ross Thompson** and **Jenny Davis** students and post docs. We welcome a new honours student **Amy Smith** and two new postgrads, **Emma Razeng** and **Ashley Murphy.** They are working with **Jenny Davis** and **Paul Sunnucks** on various aspects of dispersal and gene flow in arid zone aquatic macroinvertebrates and fish. **Pavel Kratina** has joined the group for a flying visit working with **Ross** and **Ralph Mac Nally** as a visiting post doc from UCDavis. Honours students, **Caitlin Knight** who has been working on urban turtles (with **Jenny Davis** and **Richard Reina**) and **Glenis McBurnie** who has been working on arid zone aquatic insect dispersal (with **Jenny Davis** and **Ross Thompson**) are in the write up stage and are about to finish their honours projects. **Darren Giling** is heading off to a student conference for conservation science in Cambridge, UK and is now at the writing up stage of his PhD. **Mel Klamt** and **Adrian Dusting** both attended the student conference for conservation science in Brisbane, QLD. **Teresa Mackintosh** is off to the Society of Freshwater Science conference held in Jacksonville, Florida and is tying up loose ends of her fieldwork for her PhD.

Clarissa Barbosa is still up to her neck in zooplankton and invert samples from both central Australia and her major experiment. **Mel Klamt** has started her field season chasing plats around creeks in urban Melbourne. **Nicholas Moran** is heading off into the field looking at food web dynamics in the arid zone.

On the post-doc front, **Sally Hladyz (CSIRO Cluster)** has been studying the mysterious ways of Bayesian analyses for her research on the benefits of environmental flows to rivers. Congratulations to **Lien Sim,** who has been working on the **NCCARF** arid zone project, on the birth of her daughter, Rhian An-Li Sutherland. **Alejandra Moran-Ordonez**, (also on the **NCCARF** project) has been analysing spatial structure in arid zone aquatic meta-communities. Her spatial skills will be greatly missed when she moves to Melbourne Uni at the end of April.

Mel Klamt, Teresa Mackintosh and Sally Hladyz

PAST ASL CONGRESS VENUES

Ever wondered when (or where) that conference was that you went to, but maybe had a few too many to remember?

Thanks to Richard Marchant and Andrew Boulton, now all you need do is consult this list:

Australian Society for Limnology Inc

Conference Venues 1962-2013

The inaugural meeting of the Society was held in Canberra in 1961 and the first conference in 1962....

1962	Monash University, Victoria
1963	Narrandera, NSW
1964	Canberra, ACT
1965	Brisbane, Qld
1966	Miena, Tas
1967	Warragamba Dam, Sydney
1968	Renmark, SA
1969	Jindabyne, NSW
1970	Colac, Vic.
1971	Hobart, Tas
1972	Narrandera, NSW
1973	Jamieson, Vic
1974	Noosa-Tewantin, Qld
1975	Canberra, ACT
1976	Tanunda, SA
1977	Lismore, NSW
1978	Menindee, NSW
1979	Tallangatta, Vic
1980	Queenstown, Tas
1981	Narooma, NSW
1982	Griffith, NSW
1983	Griffith University, Brisbane, Qld
1984	Mt Gambier, SA
1985	Jarrahdale, WA
1986	Lorne, Vic (Celebrating 25 years of ASL and the launch of

"Limnology in Australia" De Deckker & Williams)

1987 Hume Weir, Albury, NSW

1988 Magnetic Island, Qld

1989 Canberra, ACT

1990 Jabiru, NT

1991 Lorne, Vic

1992 Bronte Park, Tas

1993 Marcoola, Qld

1994 Rottnest Island. WA

1995 Jenolan Caves, NSW

1996 Berri, SA

1997 Albury, NSW

1998 Peaks Crossing, Qld

1999 Lake Taupo, New Zealand (combined ASL and NZ Freshwater Sciences Society meeting)

2000 Darwin, NT

2001 Moama, NSW

2002 Margaret River, WA

2003 Warrnambool, Vic (combined ASL and NZ Freshwater Sciences Society meeting)

2004 Adelaide, SA

2005 Hobart, Tas

2006 Albury, NSW

2007 Queenstown, New Zealand (combined ASL and NZ Freshwater Sciences Society meeting)

2008 Mandurah, WA

2009 Alice Springs, NT

2010 Thredbo, NSW

2011 Brisbane, Qld (combined ASL and NZ Freshwater Sciences Society meeting)

2012 Armidale, NSW

2013 Canberra, ACT

ASL EXPERTS

The following ASL members have volunteered to speak as experts on the topics listed under their name. In doing so they speak on their own behalf not on behalf of the ASL.

If you wish to be included on the list contact Dr R.Marchant at rmarch@museum.vic.gov.au

Prof A. Arthington: in stream flows, ecology of exotic fishes, conservation of rare fishes. Australian Rivers Institute, Griffith University, Nathan QLD 4111. Phone (07) 3875 7403, Fax (07) 3875 7615, email: a.arthington@mailbox.gu.edu.au

A/Prof P. Boon: bacteriological issues, wetlands. Environmental Management, Victoria University of Tech., PO Box 14428 MMC, VIC 3000. Phone (03) 9365 2214, Fax (03) 9365 2465, email: paul.boon@vu.edu.au

Dr K.Bowmer: pesticides - fate and ecological impact, aquatic plant management. Charles Sturt University, PO Box 588, Wagga Wagga, NSW 2678. Phone (02) 6933 2221, Fax (02) 6933 2060, email: kbowmer@csu.edu.au

Dr M. Brock: temporary wetlands, aquatic plants. 47 Brightwater Rd, Blackmans Bay, TAS 7052. Phone (03) 6227 1812, mobile 0429721416, email: brock.margaret@gmail.com

Prof. S. Bunn: stream ecology, ecology of riparian zones, biomonitoring. Australian Rivers Institute, Griffith University, Nathan, QLD 4111. Phone (07) 3735 7407, Fax (07) 3735 7615, email: s.bunn@griffith.edu.au

Dr M.Casanova: charophytes, temporary wetlands. 273 Casanova Rd Westmere, VIC 3351. Phone (03) 5350 2111, email: amcnova@netconnect.com.au

Prof J.Davis: wetland and stream ecology, ecology of central Australian waterbodies. Department of Biological Sciences, PO Box 18, Monash University, Clayton VIC 3800. Phone (03) 9905 1063, email: Jennifer.Davis@sci.monash.edu.au

Prof. P. De Deckker: salt lakes: biology, chemistry and history; palaeolimnology towards understanding past environmental change. Dept. of Earth & Marine Sciences, The Australian National University, Canberra ACT 0200. Phone (02) 6125 2070, Fax (02) 6125 5544, email: patrick.dedeckker@anu.edu.au

Dr. M. Douglas: tropical freshwater ecology, intermittent streams, tropical floodplains. School of Biological and Environmental Sciences, Northern

Territory University, Darwin, NT 0909. Phone (08) 8946 7261, Fax (08) 8946 6847, email: michael.douglas@ntu.edu.au

Dr S.Eberhard: groundwater dependent ecosystems (subterranean fauna), caves and karst. Subterranean Ecology, Scientific Environmental Services, Greenwood, WA. Phone (08) 9203 9551

Dr M. Finlayson: wetland ecology and management; mining and agriculture impacts; inventory and assessment, Ramsar convention. Institute of Land, Water and Society, Charles Sturt University, Albury NSW. Phone (02) 6051 9779, email: mfinlayson@csu.edu.au

Dr A. García: taxonomy, ecology, biology and biogeography of extant and fossil charophytes. School of Earth and Environmental Sciences, University of Wollongong, NSW 2522. Phone (02) 4221 5966, Fax (02) 4221 5703, email: adriana@uow.edu.au

A/Prof M.Grace: nutrient cycling and biogeochemical processes. Chemistry Department, Monash University,Clayton, VIC 3800. Phone (03) 9905 4078, Fax (03) 9905 4196, email: michael.grace@sci.monash.edu

Dr T. Grant: platypus biology. Biological Science, University of NSW, PO Box 502, Cronulla, NSW 2230. Phone (02) 9527 2862, Fax (02) 9527 2862, email: t.grant@unsw.edu.au

Associate Professor M. Greenway: Constructed wetlands, Melaleuca wetlands, biogeochemical processes. School of Environmental Engineering, Faculty of Environmental Engineering, Griffith University, Nathan QLD 4111. Phone (07) 3875 7486, Fax (07) 3875 7404, email: m.greenway@mailbox.gu.edu.au

K. Hortle: Fisheries and environment, impact of mining, impact of development in SE Asia and PNG on rivers. 23A Waters Grove, Heathmont VIC 3135. Phone (03) 9720 5891, email: kent_hortle@bigpond.com

A/Prof P. Horwitz: conservation of freshwater invertebrates. Centre for Ecosystem Management, Edith Cowan University, Joondalup Drive, Joondalup, WA 6027. Phone (08) 9400 5558, Fax (08) 9400 5070, email: phorwitz@cowan.edu.au

Prof. P.S. Lake: stream ecology, conservation freshwater biota. Department of Biological Sciences, PO Box 18, Monash University, Clayton, VIC 3800. Phone (03) 9905 5653, Fax (03) 9905 5613, email: sam.lake@sci.monash.edu.au

Dr C. McCullough: mine water remediation and management, mining pit lakes, acid mine drainage, acid sulfate soils, ecotoxicology. Edith Cowan University, 270 Joondalup Drive, Joondalup WA 6027. Phone (08) 6304 5143, email: c.mccullough@ecu.edu.au

Dr V. Matveev: plankton food webs, biomanipulation. CSIRO Land and Water, 80 Meiers Road, Indooroopilly, QLD 4068. Phone (07) 3214 2755, Fax (07) 3214 2881, email: vlad.matveev@csiro.au

K. Muller: constructed wetlands, wetlands of the lower Murray. River Murray Catchment Water Management Board, 1 Colman Tce, Strathalbyn SA 5255. Phone (08) 8536 8125, Fax (08) 8536 8126, email: kerri_muller@triplei.com.au

Dr R. Pearson: tropical freshwater ecology. School of Tropical Biology, James Cook, University, Townsville, QLD 4811. Phone (07) 4781 5466, Fax (07) 4781 5511, email: richard.pearson@jcu.edu.au

Dr P. Pollard: microbial ecology. Australian Rivers Institute, Griffith University, Nathan QLD 4111 Phone (07) 3875 6597, Fax (07) 3875 7404, email: p.pollard@griffith.edu.au, web: www.microbialecology.org

Dr W. Ponder: taxonomy, biogeography and biology of freshwater mollusca. Invertebrate Zoology, Australian Museum, 6 College St, Sydney NSW 2001. Phone (02) 9320 6120, Fax (02) 9320 6050, email: winstonp@amsg.austmus.gov.au

Dr M. Serena: platypus ecology and conservation. Australian Platypus Conservancy, PO Box 84, Whittlesea VIC 3757. Phone (03) 9716 1626, Fax (03) 9716 1664, email: platypus@vicnet.net.au

Dr B. Sherman: reservoir management, cold water pollution and algal blooms. CSIRO Land & Water, Water Quality and Environmental Flows, GPO Box 1666 Canberra ACT 2601. Phone (02) 6246 5579, email: brad.sherman@csiro.au

Dr R. Thompson: food web ecology, stream and lake ecology, climate change effects on aquatic habitats. Institute for Applied Ecology, University of Canberra. Phone (04) 3053 4094 Email: ross.thompson@canberra.edu.au

Dr B. Timms: lake geomorphology, coastal dune lakes, arid zone wetlands. Australian Wetlands and Rivers Centre, BEES, University of NSW, Sydney NSW 2052. Email: brian.timms@unsw.edu.au

Dr L. Townley: groundwater-surface water interactions. Townley & Associates Pty Ltd, PO Box 425, Claremont WA 6010. Phone (08) 9389 6377, Fax (08) 9389 6477, email: LTownley@Townley.com.au

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